

Appl. No. 10/661,159
Amtd. dated 1/17/07
Reply to Office action of 11/1/06

RECEIVED
CENTRAL FAX CENTER

JAN 30 2007

Remarks/Arguments

The rejections and comments of the Examiner set forth in the Office Action dated November 1, 2006 have been carefully reviewed by the Applicant. Claims 7 and 8 are rejected under 35 U.S.C. 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. In response, Claims 7 and 8 have been amended to incorporate all of the limitations of the canceled base claim (Claim 1).

Claims 7-8 and 10-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Zehel et al. (5251611). The Applicant respectfully traverses the rejection of claims 7 and 10-15 on the grounds that Zehel fails to anticipate each and every element of Claims 7 and 10-15. Specifically, Zehel fails to anticipate "laterally parallel" rigidizing sections. The rejection holds that the first rigidizing section 10 and the second rigidizing section 11 that are "laterally parallel." In FIG. 1, it can be seen that first rigidizing section 10 and second rigidizing section 11 are coaxial, and not "laterally parallel." Further resolving any ambiguity in the drawing, Zehel in column 4 line 6 states that the structure "includes an inner flexible conduit generally 10." In column 6 line 9 Zehel states: "The conduit 10 is threaded through an outer flexible conduit or similar tube 11." Zehel's clear written description of an inner conduit threaded through an outer conduit leaves no doubt about

Appl. No. 10/661,159
Amdt. dated 1/17/07
Reply to Office action of 11/1/06

the coaxial (and hence non laterally parallel) nature of the described structure.

As shown in FIGs. 3, 8, 9, and 11, and described in paragraph 43 of the present application, "coaxial" and "laterally parallel" are alternative embodiments that are mutually exclusive. A "coaxial" structure has a single common axis, whereas a "laterally parallel" structure has two adjacent and parallel structures. Zehel does not use the term "laterally parallel," and fails to disclose any pair of rigidizing sections that can be described as "laterally parallel." The Applicant has adopted the term "laterally parallel" to specifically distinguish a pair of adjacent and parallel structures from a pair of coaxial structures such as that disclosed by Zehel.

The use of the term "laterally parallel" with respect to the present claimed invention is consistent with its use in the mechanical arts. For example, US5524517 (FIG. 6 and col. 5, line 16) uses the term "laterally parallel" to describe a track rod 70a and a track rod 70e. Track rods 70a and 70e are clearly adjacent and parallel, and not coaxial. Many other similar examples may be found by searching the USPTO database using the term "laterally parallel."

The Applicant has amended claim 8 and believes in its amended form it should be allowable on the grounds that Zehel fails to anticipate each and every element of Claim 8. Specifically, Zehel fails to anticipate "a pulley at a distal end of said linkage sheath." Zehel refers to a "pulley" at col. 7, line 45 and col. 11, line 3; however, Zehel is silent as to how a pulley is to be incorporated in the device. All discussion and display of a "distal end" by Zehel fails to disclose a

Appl. No. 10/661,159
Amtd. dated 1/17/07
Reply to Office action of 11/1/06

pulley or any other tensioning device. In fact, at col. 6, line 59 and col. 8, line 7 Zehel teaches that the cables are attached to the distal end. Further, Zehel equates a pulley with levers and pneumatic or hydraulic cylinders (col. 7, lines 44-45), or solenoid feedback systems (col. 11, lines 2-4). The equivalent devices disclosed by Zehel are not adaptable to the distal end of the device.

It should also be noted that Zehel discusses pulleys as "a tensioning means" and a "device for supplying equal force." A pulley at the distal end is not suitable for providing the fundamental tension in the cables. One with normal skill in the art would interpret the devices disclosed by Zehel as being operative at the proximal end, considering the patient discomfort that would result from an effective solenoid feedback system or hydraulic cylinder mounted on the distal end of the device.

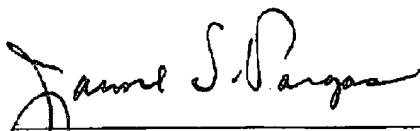
Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zehel et al. in view of Secrest et al. (6666847). The Applicant respectfully traverses the rejection on the grounds that neither Zehel nor Secrest suggests the claimed combination. As noted above, Zehel fails to teach "a pulley at a distal end of said linkage sheath." Further, at col. 6, line 59 and col. 8, line 7, Zehel teaches that the cables are attached to the distal end. Although Secrest discloses a pulley at the distal end of a flexible cannula, Secrest is silent with respect to the use of a pulley in a tensioning system. The combination of Secrest with Zehel in effect contravenes an explicit teaching of Zehel with respect to the distal configuration of his device. As now claimed in amended claim 8, applicant's pulley, which is

Appl No. 10/661,159
Amdt. dated 1/17/07
Reply to Office action of 11/1/06

affixed to a distal end of a rigidizing section, cannot serve as a tensioning device or an actuator for the said section. The pulley as now claimed cannot move its position relative to the rigidizing section to which it is affixed. It is structurally distinct from, serves different function from and therefore is not anticipated by any of the cited prior art.

In summary, Applicant asserts that Claims 7-15 are in condition for allowance and earnestly solicits such action by the Examiner.

Respectfully submitted,



Date: 1/29, 2007

Jaime S. Vargas
Address: 9 Eagle Hill Terrace
Redwood City, CA 94062
Phone number: 650-366-1192